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#### REMARKS/ARGUMENTS

Applicant graciously appreciates the Office's attention to the instant application. In view of the following remarks, Applicant respectfully requests reconsideration and allowance of the pending claims of the instant application. This response is believed to be fully responsive to all issues raised in the May 22, 2006 Office Action. The Title is currently amended. Claims 1, 11, 13, 24, 26, 37, 39, 41 and 43 are currently amended. Claims 1-44 are pending.

#### **Objections**

Specification

As stated in the Response of June 13, 2005: "Applicant hereby proposes amendment of the title to read "User Name Mapping for a User in a Heterogeneous Network". Applicant respectfully requests acknowledgement of the Office as to the sufficiency of the proposed title. In the instance that the Office finds the proposed title sufficient, Applicant requests entry of such amendment to the title".

In the instant Office Action, the Office objected to the title of the invention as not being descriptive. Applicant respectfully requests that the Office amend the title of the instant application as follows:

- - User Name Mapping in a Heterogeneous Network - -

Claims

The Office objected to claims 13 and 24. Applicant submits that the amendments to claims 13 and 24 correct the informalities noted by the Office.

# Rejections

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Anticipation

Claims 1-4, 6, 11, 13-17, 19-24, 26-39 and 43 are rejected under 35 U.S.C. §102(e) as being anticipated by Blakely, III et al. (USPN 5604490), referred to herein as the Blakely reference. Applicant respectfully requests clarification as to the proper sub-section §102.

*Obviousness* 

Claims 7-10, 40, 41, 42 and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Blakely reference in view of White (USPN 6826692), referred to herein as the White reference.

Claims 5, 12, 18 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Blakely reference in view of Gudjonsson et al. (USPN 6564261), referred to herein as the Gudjonsson reference.

Summary

All rejections rely on the Blakely reference.

# Blakely Reference

The Blakely reference pertains to security protocols for a system under a single operating system. At col. 4, lines 15-20, the Blakely reference states:

Each user of the network 10 or a user of a single computer system 12, not necessarily connected to the network, is assigned specific user credentials that allows the user access onto the network system and to provide access to secured subsystems on the network. All these systems coexist under a single operating system.

Blakely reference at col. 4, lines 15-20 (emphasis added).

Thus, according to the Blakely reference, a user is "assigned specific user credentials that allows the user access onto the network system and to provide access to secured subsystems on the network" where "all these system coexist under a single operating system".

The Blakely reference's method and system for providing a user access to multiple secured subsystems under a single operating system relies on the following (see, e.g., col. 3, line 14 to col. 4, line 57):

- 1. Unique information to authenticate the user for the entire system under a single operating system;
- 2. A user handle (global of the user) generated by the single operating system;
- 3. New user credentials (for each of the security protocols) generated by the single operating system;
- 4. An association between the new user credentials and the user's user handle; and
  - 5. A map to map the user's user handle to old user credentials.

The method and system of the Blakely reference requires the existence of unique information and user credentials (i.e., "old" user credentials) so that the single operating system can generate a user handle and "new" user credentials. The method and system create an association between the "new" user credentials and the user handle and then map the user handle to the "old" user credentials. The single operating system, after generating new user credentials for a first process, can then use the new user credentials for other processes within the system.

## Brief Summary of Various Subject Matter of the Instant Application

The instant application pertains to heterogeneous networks. A particular example considers a scenario where a user may have more than one user name in such heterogeneous networks. For example, a user may have a user name for a network that relies on a WINDOWS® OS and a different user name for a network that relies on a UNIX OS. Table 1 at page 20 of the instant application gives two examples: a user with a user name JohnDoe for a WINDOWS® OS network and a user name Johnd for a UNIX OS network and a user with a user name Maryjane for a WINDOWS® OS network and Maryj for a UNIX OS network. This is just one issue that may arise in a heterogeneous network.

For a couple of other issues that may arise in a heterogeneous network with more than one operating system, Applicant directs the Office to the instant application at page 15, lines 4-15:

When a user logs on to a WINDOWS® OS computer, the user is identified with a WINDOWS® OS security identifier (SID). For the user to access UNIX® OS network file system resources, the user needs to acquire UNIX® OS identification information (e.g., a UID and/or a GID). Typically, this requires the user to be authenticated with the UNIX® OS network using either a personal computer network file system server (e.g., a server using PC-NFS® software) or a network information system (e.g., a server using NIS software). In a heterogeneous network, another issue exists in the reverse direction; in other words, when a user logs on to a UNIX® OS computer the user is allocated UNIX® OS user information only (e.g., a UID and/or a GID). Hence, the user needs a way to obtain the SID that identifies that user to WINDOWS® OS computers while accessing files from a WINDOWS® OS computer.

Thus, in a heterogeneous network with more than one operating system, various issues may arise. Various claimed subject matter pertains to solutions for one or more of such issues.

## Rejections under 35 U.S.C. §102(e): Blakely reference

Claims 1-4, 6, 11, 13-17, 19-24, 26-39 and 43 are rejected under 35 U.S.C. §102(e) as being anticipated by the Blakely reference. As set forth in §2131 of the MPEP: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989).

To expedite prosecution of the pending claims, Applicant further submits that the Blakely reference fails to provide evidence sufficient to support a prima facie case of obviousness under 35 U.S.C. §103 (see Rejections under 35 U.S.C. §103 for MPEP §2143).

# Multiple Operating Systems

Applicant currently amends all independent claims (claims 1, 11, 13, 24, 26, 37, 39, 41 and 43) to recite a first operating system and a second operating system where the operating systems differ. For this reason alone, Applicant submits that claims 1-4, 6, 11, 13-17, 19-24, 26-39 and 43 are not anticipated by the Blakely reference. In particular, the Blakely reference pertains to a method and a system under a single operating system (see, e.g., Blakely reference at col. 4, lines 15-20). Further, Applicant submits that the Blakely reference fails to provide evidence sufficient to support a prima facie case of obviousness as to multiple operating systems because of its explicit reliance on a single operating system.

 User Name(s) and Relationships in a Heterogeneous Network

Applicant submits that the Blakely reference does not disclose the recited relationships for the user name or user names of independent claims 1, 11, 13, 24, 26, 37, 39 and 43. Further, Applicant submits that the Blakely reference fails to provide evidence sufficient to support a prima facie case of obviousness as to such relationships.

The Blakely reference states:

At step 210, a UIA receives a request to start a process on behalf of the user identified by user name "User A". Next, at step 212, the UIA authenticates the identity of "User A" through the UAS. The UAS prompts the user for a password or other authentication data. At step 214 the UIA asks the operating system to generate a user handle "UH" and to associate it with "User A". Then, at step 216, the operating system notifies each registered ACA that "User A" has been authenticated and associated with "UH". Next, at step 218, each ACA generates the appropriate user credentials for "User A" and, at step 220, associates the user's credentials with the pair ("User A", "UH"). Once this is done, at step 222, each ACA has a mapping between "UH" and its view of "User A"s credentials. Following this, at step 224, the UIA asks the operating system to generate a child process "P1" and tag it with the pair ("User A", "UH"). Thus completes the mapping by the operating system across the security subsystems or programs to support multiple views of the user's credentials.

Blakely reference at col. 4, lines 39-58.

According to the Blakely reference a user identification authority (UIA) authenticates a user having a user name (e.g., "User A") through use of a user authentication service (USA) that prompts a user for authentication data. Next, the UIA asks the single operating system to generate a user handle "UH" and to associate it with the user name of the user. This is a circular operation that occurs under a single operating system. In other words, a user name is used, in part, to generate a user handle, which is then associated with the user name. The user

credentials, whether "old" or "new" are for specific access control authorities (ACAs) that operate under the one and only operating system. As stated, this allows "multiple views of the user's credentials". Given this evidence, Applicant submits that the Blakely reference fails to disclose, teach or suggest multiple operating systems and fails to disclose, teach or suggest that a user would ever need or have more than one user name.

In a heterogeneous network, per the claims, issues exist that are not solved by the method or system of the Blakely reference. For example, how would the Blakely reference address issues germane to a user with a user name for one domain under one OS and another user name in a domain under another OS? Applicant fails to find any evidence in the Blakely reference to suggest a solution for such a scenario.

Below, Applicant presents specific arguments for the independent claims rejected under the Blakely reference.

<u>Claim 1</u> recites: "mapping the user name to a user name associated with the same user in a second network". Applicant fails to find evidence of such mapping or multiple user names in the Blakely reference. Claim 11 recites a similar relationship.

Claim 13 recites: "mapping the authenticated user to a user identification number associated with the user in the second network" where the authentication occurs in a first network that uses an operating system that differs from the operating system of the second network. As the Blakely reference relies on a single operating system, there is no evidence of authenticating a user in another network that uses a different operating system. Claim 24 recites a similar relationship.

Claim 26 recites: "mapping the user identification number to a user name associated with the same user in the second network wherein the user's user identification number optionally maps to more than one user name for the user in the heterogeneous network" where the user identification number is associated with a user in a first network. As the Blakely reference relies on a single operating system for a user with a single user name, there is no evidence of mapping a user identification number to more than one user name. Claim 37 recites a similar relationship.

<u>Claim 39</u> recites: "mapping the user name to a user name associated with the same user in a second network". Applicant fails to find evidence of such mapping or multiple user names in the Blakely reference.

Claim 43 recites: "receiving on a computer in a second network a user identification number associated with a user in a first network" and "mapping the user identification number to a user name associated with the same user in the second network wherein the mapping includes using a map on a mapping server" where the first network uses an operating system that differs from the operating system of the second network. As the Blakely reference relies on a single operating system, there is no evidence of receiving a user identification number associated with a user in a first network and mapping it to a user name in a second network that uses a different operating system.

<u>Dependent Claims 2-4, 6, 14-17, 19-24 and 27-38</u> depend on the aforementioned independent claims. Applicant submits that these claims are not anticipated by the Blakely reference for at least the same reasons stated for their respective independent claims.

#### Rejections under 35 U.S.C. §103(a): Blakely reference and White reference

Claims 7-10, 40, 41, 42 and 44 are rejected under 35 U.S.C. §103(a) as being unpatentable over the Blakely reference in view of the White reference. Per MPEP §2143, to establish a prima facie case of obviousness, three basic criteria must be met: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; second, there must be a reasonable expectation of success; and finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicant has discussed independent claims 1, 39 and 43 above and reiterates the foregoing evidence and arguments for patentability of dependent claims 7-10, 40 and 44.

With respect to independent claim 41 and its dependent claim 42, as stated above, Applicant currently amends claim 41 to recite a first operating system and a second operating system where the operating systems differ. Applicant submits that the White reference does not supply that which is missing in the Blakely reference. In particular, Applicant submits that, given the White reference, one of ordinary skill in the art would not be motivated to modify the method and system of the Blakely reference to meet the claimed subject matter. Again, the Blakely reference pertains to different security protocols for ACAs governed by a single operating system while the claimed subject matter pertains to user resources under multiple operating systems.

The White reference states at col. 7, lines 39-40: "each record at a minimum is comprised of a user name, password and user role". And, with respect to use of a user name, the White reference states at col. 8, lines 4-15:

If the corresponding user name/password is stored in the local authentication database 42, the user will be connected to the local server. If the username/password combination is not found in the local authentication database, then the person server 31 searches the network database 43 (directory) to determine whether the user name exists on the enterprise. If the user name is found in the network database, the user authentication request is routed to the identified LSS for processing of the request. If, on the other hand, the user name is not found in the network database, the system will either deny the user's request or it may query the user to provide more information in order to process the authentication request.

White reference at col. 8, lines 4-15 (emphasis added).

Based on this evidence, Applicant further submits that the White reference fails to provide evidence to suggest a solution for a user in a heterogeneous network having a user name in one domain under one OS and another user name in another domain under a different OS.

For at least the foregoing reasons, Applicant asserts that claims 7-10, 40, 41, 42 and 44 are patentable over the Blakely reference and the White reference.

# Rejections under 35 U.S.C. §103(a): Blakely reference and Gudjonsson reference

<u>Claims 5, 12, 18 and 25</u> are rejected under 35 U.S.C. §103(a) as being unpatentable over the Blakely reference in view of the Gudjonsson reference. The record contains a detailed discussion of the Gudjonsson reference and its disclosure of anonymous users (e.g., user(s) 7). Applicant refers the Office to the record and the foregoing discussion of the Blakely reference with respect to independent claims 1, 11, and 24, as currently amended. Applicant submits that the Gudjonsson reference does not disclose, teach or suggest that which is lacking

in the Blakely reference. As the Blakely reference pertains to a single operating system, as stated numerous times, Applicant submits that it offers insufficient evidence to teach or suggest a method or a system for multiple operating systems.

Applicant submits that claims 5, 12, 18 and 25 are patentable over the Blakely reference in view of the Gudjonsson reference for at least the reasons state with respect to independent claims 1, 11, and 24.

#### Conclusion

Pending claims 1-44 are believed to be in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the subject application. If any issues remain that prevent issuance of this application, the Office is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

Dated: 8-27-86

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